

## AMENDMENT TO THE CLAIMS

What is claimed is:

1. (currently amended) In a bi-directional communication system, a method for directing packetized data to a local network wherein said packetized data comports to hierarchical layers of communication protocols, comprising the steps of:

comparing a received IP packet destination address in a first protocol layer with a predetermined IP address to determine if there is an address match; and

redirecting a payload of said received IP packet from an Internet network to said local network in response to said address match by;

substituting a second protocol layer address, in a packet of said packetized data, for a received second protocol layer destination address corresponding to a destination accessed on said local network, where both the second protocol layer address and the received second protocol layer destination address reside in a second protocol layer different than the first protocol layer.

2. (currently amended) A method according to claim 1, wherein if there is no address match

said payload of said received IP packet is directed to a different destination ~~that~~ than said local network to support a first Application operating concurrently with a different second Application being performed with said local network.

3. (original) A method according to claim 2, wherein

said first Application is one of (a) a web surfing application, (b) Email, (c) Internet phone/videophone, and

said second Application is one of (i) home appliance control, (ii) peripheral control and (iii) a diagnostic function.

4. (currently amended) A method according to claim 1, wherein

~~said bi-directional communication system is a cable modem and~~  
including the step of

initiating an Application in response to receiving said directed payload.

5. (currently amended) A method according to claim 1, wherein  
said redirecting step redirects a payload of said received IP packet ~~from a first network~~ to a communication buffer present in said local network to support a local application comprising one or more of, (a) home appliance control, (b) peripheral control, (c) a communication function, (d) a diagnostic function and (e) secure private internet or intranet communication functions.
6. (currently amended) In a bi-directional communication device using an Internet Protocol (IP), a method for directing IP data, wherein said IP data is structured in the form of hierarchical layers of communication protocols, comprising the steps of:  
comparing a received IP packet IP destination address in a first protocol layer with a predetermined IP address to determine if there is an address match, wherein upon said address match, said IP packet is assigned a as-to determine a second protocol layer (MAC) destination address that resides in a second protocol layer, in response to said address match; and  
redirecting a payload of said received IP packet using said second protocol layer (MAC) destination address determined in response to said address match to a device running an Application corresponding to said second protocol layer destination address.
7. (currently amended) A method according to claim 6, including the steps of  
receiving said redirected payload using said second protocol layer (MAC) destination address, and  
initiating an said Application in response to receiving said redirected payload.
8. (original) A method according to claim 6, wherein  
said predetermined IP address is within a class of one or more addresses designation for private and non-public Internet usage.
9. (currently amended) A method according to claim 6, wherein in said redirecting step  
said redirecting step comprises substituting ~~said a~~ a second protocol layer (MAC) address that was specified in said IP packet before said comparing step with said for a received second protocol layer (MAC) destination address.

10. (original) A method according to claim 6, wherein  
said redirecting step redirects a payload of said received IP packet from a first network to a different second network on a packet by packet basis.
11. (original) A method according to claim 10, wherein  
said payload of said received IP packet is redirected from a first public Internet network to a second local network comprising one of (a) an Ethernet network, (b) a Universal Serial Bus (USB) network and (c) a Home Phoneline Networking Alliance (HPNA) network.
12. (original) A method according to claim 6, wherein  
said redirecting step redirects a payload of said received IP packet from a first network to a communication buffer within said bi-directional communication device.
13. (original) A method according to claim 12, wherein  
said redirecting step redirects a payload of said received IP packet from a first network to a communication buffer within said bi-directional communication device to support a local application comprising one or more of: (a) home appliance control, (b) peripheral control, (c) a communication function, (d) a diagnostic function and (e) secure private internet or intranet communication functions.
14. (currently amended) A method according to claim 12, wherein  
for individual received IP packets said redirecting step redirects payloads of said received IP packets from a first network to a communication buffer within said bi-directional communication device by substituting said a second protocol layer (MAC) address that was present in said IP packets before said comparing step for a received second protocol layer (MAC) address.
15. (original) A method according to claim 12, wherein  
said bi-directional communication device is a cable modem.
16. (currently amended) A method according to claim 6, wherein

said second protocol layer (MAC) destination address is determined from a database mapping said received IP packet destination address to said second protocol layer (MAC) destination address.

Claims 17-20 (cancelled)

21. (currently amended) In a bi-directional communication system, a method for directing packetized data between different networks using hierarchical layers of communication protocols comprising the steps of:

intercepting a domain name resolution request if a domain name matches a predetermined entry in a domain name database;

translating said intercepted domain name to a predetermined IP address; and

redirecting a payload of a received IP packet destined for said intercepted domain name ~~predetermined IP address~~, wherein said redirecting step substitutes a different MAC layer address for a received MAC layer address.

22. (cancelled)

23. (original) A method according to claim 21 including the step of communicating said predetermined IP address to a requesting client.

24. (previously presented) A method according to claim 1, wherein said second protocol layer address is a (MAC) address.